

# CORPORATE AVERAGE FUEL ECONOMY (CAFE) STANDARDS



### AN OVERVIEW OF CAFE STANDARDS

Corporate Average Fuel Economy, or CAFE, is a set of standards designed to improve the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) regulates CAFE standards and the U.S. Environmental Protection Agency (EPA) measures vehicle fuel efficiency. Congress specifies that CAFE standards must be set at the "maximum feasible level" given consideration for the following:



Technological feasibility,



Economic practicality,



The effect of other standards on fuel economy, and



The need of the Nation to conserve energy. The United States and Canada have the lowest standards in terms of fleet-average fuel economy rating, and they have the highest greenhouse gas emission rates among first world nations; the European Union and Japan have higher fuel economy standards and lower emission standards than the United States.

# CAFE VEHICLE CLASSIFICATION

Cars and light trucks are classified separately for CAFE and are held to different standards:

**Passenger Car** – Classified as any 4-wheel vehicle not designed for off-road use that is primarily used for transporting 10 people or less, passenger cars must have an average fuel economy of 27.5 mpg or greater.

**Light Truck** – A vehicle can be classified as a truck if it has either 4-wheel drive or a payload capacity less than 4,000 pounds. Light trucks must have an average fuel economy of 20.7 mpg or greater. Trucks over 4,000 but under 8,500 pounds must average 23.1 mpg in 2009 and 23.5 mpg in 2010. Light trucks that exceed 8,500 pounds gross vehicle weight rating (GVWR) do not have to comply with CAFE standards through 2010. Vehicles include pickup trucks, passenger vans, SUVs and some tow trucks.

Due to the Energy Independence and Security Act of 2007, automakers must boost fleet-wide gas mileage to 35 mpg by the year 2020 for both passenger cars and light trucks.

#### **FUEL ECONOMY DATA TYPES**

Three different sets of fuel economy values currently exist. These include:



NHTSA's CAFE values - used to determine manufacturers' compliance with the applicable average fuel economy standards also used to develop NHTSA's annual report, the Automotive Fuel Economy Program Annual Update.



# EPA's unadjusted dynamometer values -

calculated from the emissions generated during the testing using a carbon balance equation. EPA knows the amount of carbon in the fuel, so by measuring the carbon compounds expelled in the exhaust they can calculate the fuel economy.



# EPA's adjusted on-road

values - listed in the Fuel Economy Guide and on new vehicle labels, values are adjusted to account for the in-use shortfall of EPA dynamometer test values.



